

## Abstract

When performing a process in an object to be authenticated, there is a case that an execution result depends on the reference data value to be referenced and remains undefined. When the execution result is underfined and a process after that references the execution result, the execution results may have different values. As a result, the execution results cannot be compared and authentication cannot be continued. There is provided an authentication device for giving the same test pattern to an object to be authenticated and an expectation value generation device, performing simulation, and comparing the execution results. Data being simulated is extracted. According to the analysis result of the extracted data, the simulation is controlled. Alternatively, simulation after the underfined result is obtained is controlled. Thus, it is possible to prevent execution of a process which becomes an underfined result.